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(57) Abstract: BaAuGe, BaAuGaGe, BaPtGe, BaPdGe, BaPdGaGe, BaPdGaSi, BaPtGaSi, BaCuGaGe, and BaAgGaGe clathrate compounds, and thermoelectric conversion element comprising the clathrate compounds. Methods for producing thermoelectric conversion elements are also provided, comprising melting, heat-treating, particle-forming, and sintering processes.

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